SEQUENCE LISTING

(1) GENERAL INFORMATION:

   (i) APPLICANT: (Other than US) INTERNATIONAL DIABETES INSTITUTE and
             DEAKIN UNIVERSITY
             (US only) G. COLLIER and P.Z. ZIMMET

  (ii) TITLE OF INVENTION: A NOVEL GENE AND USES THEREFOR

 (iii) NUMBER OF SEQUENCES: 14

  (iv) CORRESPONDENCE ADDRESS:
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      (D) STATE: VICTORIA
      (E) COUNTRY: AUSTRALIA
      (F) ZIP: 3000

   (v) COMPUTER READABLE FORM:
      (A) MEDIUM TYPE: Floppy disk
      (B) COMPUTER: IBM PC compatible
      (C) OPERATING SYSTEM: PC-DOS/MS-DOS
      (D) SOFTWARE: PatentIn Release #1.0, Version #1.25

  (vi) CURRENT APPLICATION DATA:
      (A) APPLICATION NUMBER: PCT INTERNATIONAL
      (B) FILING DATE: 30-OCT-1998
      (C) CLASSIFICATION:

 (vii) PRIOR APPLICATION DATA:
      (A) APPLICATION NUMBER: PP0117/97
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      (C) CLASSIFICATION:

 (vii) PRIOR APPLICATION DATA:
      (A) APPLICATION NUMBER: PP0323/97
      (B) FILING DATE: 11-NOV-1997
      (C) CLASSIFICATION:

(viii) ATTORNEY/AGENT INFORMATION:
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(2) INFORMATION FOR SEQ ID NO:1:

   (i) SEQUENCE CHARACTERISTICS:
      (A) LENGTH: 342 base pairs
      (B) TYPE: nucleic acid
      (C) STRANDEDNESS: single
      (D) TOPOLOGY: linear

  (ii) MOLECULE TYPE: DNA

  (ix) FEATURE:
      (A) NAME/KEY: CDS
      (B) LOCATION: 29..247

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

```
GTTCCAGGAG ATTACAGCTC CAGCCACA ATG ATT GAG GTG GTT TGC AAC GAC          52
                                   Met Ile Glu Val Val Cys Asn Asp
                                    1               5

CGT CTA GGA AAG AAA GTC CGC GTT AAG TGC AAC ACC GAT GAC ACC ATC         100
Arg Leu Gly Lys Lys Val Arg Val Lys Cys Asn Thr Asp Asp Thr Ile
    10              15                  20

GGG GAC TTG AAG AAA CTG ATA GCG GCC CAA ACT GGC ACT CGT TGG AAT        148
Gly Asp Leu Lys Lys Leu Ile Ala Ala Gln Thr Gly Thr Arg Trp Asn
25              30                  35                      40

AAG ATC GTT CTT AAA AAG TGG TAC ACG ATT TTT AAG GAC CAT GTA TCT        196
Lys Ile Val Leu Lys Lys Trp Tyr Thr Ile Phe Lys Asp His Val Ser
                45              50                  55

CTG GGA GAT TAT GAA ATC CAC GAT GGG ATG AAC CTG GAG CTT TAT TAC        244
Leu Gly Asp Tyr Glu Ile His Asp Gly Met Asn Leu Glu Leu Tyr Tyr
                60                  65                  70

CAG. TAGAGGGGAA TTCCTCCACC TTGCCCAACC TTGCTTTCCT CTCCCATGGC            297
Gln

TCATTTAACA CTGTTGTAGA TGCTCATTTT TTTGTTAAGT GTACT                      342
```

(2) INFORMATION FOR SEQ ID NO:2:

   (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 73 amino acids
       (B) TYPE: amino acid
       (D) TOPOLOGY: linear

   (ii) MOLECULE TYPE: protein

   (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

```
Met Ile Glu Val Val Cys Asn Asp Arg Leu Gly Lys Lys Val Arg Val
 1               5                  10                  15

Lys Cys Asn Thr Asp Asp Thr Ile Gly Asp Leu Lys Lys Leu Ile Ala
            20              25                  30

Ala Gln Thr Gly Thr Arg Trp Asn Lys Ile Val Leu Lys Lys Trp Tyr
            35              40                  45

Thr Ile Phe Lys Asp His Val Ser Leu Gly Asp Tyr Glu Ile His Asp
    50              55                  60

Gly Met Asn Leu Glu Leu Tyr Tyr Gln
65              70
```

(2) INFORMATION FOR SEQ ID NO:3:

   (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 391 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: single
       (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

ATGTTCAACA CAGCAGCCAT CCAAGGTCCT CTAATGTCGA GGTCGGTGTT ACTAACTCCA   60

CCAAACGTTG CTGGCAGATC CTTTCTTTCA GGCGCAATTC ACGTTGTGGC TACTGTGGTA   120

GCCCCTGAAC TTCTTTGACT ATCGCCGGGT TTGACCGTGA GCAACCTTAT TCTAGCAAGA   180

ATTTTTCACC ATGTGCTAAA AATTCCTGGT ACATAGAGAC CCTCTAATAC TTTAGGTGCT   240

ACCCTACTTG GACCTCGAAA TAATGGTCAT CTCCCCTTAA GGAGGTGGAA CGGGTTGGAA   300

CGAAAGGAGA GGGTACCGAG TAAATTGTGA CAACATCTAC GAGTAAAAAA ACAATTCACA   360

TGAATAAAAA CTTTGATGCT GCAAAAAAA A   391

(2) INFORMATION FOR SEQ ID NO:4:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 16 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (ii) MOLECULE TYPE: DNA

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

AAGCTTTTTT TTTTTG   16

(2) INFORMATION FOR SEQ ID NO:5:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 13 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (ii) MOLECULE TYPE: DNA

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

AAGCTTCGGG TAA   13

(2) INFORMATION FOR SEQ ID NO:6:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 20 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

AGTCCGCGTT AAGTGCAACA   20

(2) INFORMATION FOR SEQ ID NO:7:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 20 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear
       (ii) MOLECULE TYPE: DNA
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

CTCCAGGTTC ATCCCATCGT   20

(2) INFORMATION FOR SEQ ID NO:8:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 20 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear
       (ii) MOLECULE TYPE: DNA
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

GGCTACAGCT TCACCACCAC   20

(2) INFORMATION FOR SEQ ID NO:9:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 13 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear
       (ii) MOLECULE TYPE: DNA
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

GCTTGCTGAT CCACATCTGC   20

(2) INFORMATION FOR SEQ ID NO:10:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 30 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear
       (ii) MOLECULE TYPE: DNA
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

TGGTAATAAA GCTCCAGGTT CATCCCATCG   30

(2) INFORMATION FOR SEQ ID NO:11:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 20 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear
   (ii) MOLECULE TYPE: DNA
   (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

CAAACTGGCA CTCGTTGGAA   20

(2) INFORMATION FOR SEQ ID NO:12:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 19 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear
   (ii) MOLECULE TYPE: DNA
   (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

GTTGGGCAAG GTGGAGGAA   19

(2) INFORMATION FOR SEQ ID NO:13:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 102 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear
   (ii) MOLECULE TYPE: DNA
   (ix) FEATURE:
        (A) NAME/KEY: CDS
        (B) LOCATION: 1..102

   (xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

ATG ATC GAG GTT GTT TGC AAC GAC CGT CTG GGG AAA AAG GTC CNC GTT   48
Met Ile Glu Val Val Cys Asn Asp Arg Leu Gly Lys Lys Val Xaa Val
 1   5   10   15

AAA TGC AAC ACG GAT GAT ACC ATC GGG GAC CTT AAG AAG CTG ATT GCA   96
Lys Cys Asn Thr Asp Asp Thr Ile Gly Asp Leu Lys Lys Leu Ile Ala
            20   25   30

GCC   TAA
102
Ala *

(2) INFORMATION FOR SEQ ID NO:14:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 33 amino acids
          (B) TYPE: amino acid
          (D) TOPOLOGY: linear

     (ii) MOLECULE TYPE: protein

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

Met Ile Glu Val Val Cys Asn Asp Arg Leu Gly Lys Lys Val Xaa Val
 1   5   10   15

Lys Cys Asn Thr Asp Asp Thr Ile Gly Asp Leu Lys Lys Leu Ile Ala
          20   25   30

Ala